

## CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method, comprising:  
determining a shelf address and ~~[[/or]]~~ a slot address of a board installed in a card modular platform, wherein the shelf address corresponds to a physical shelf of the card modular platform and the slot address corresponds to a physical slot location on the shelf of the card modular platform; and  
automatically assigning a static network Internet Protocol ("IP") address for at least one network port on the board based on a combination of the shelf address and ~~[[/or]]~~ the slot address.
2. (Cancelled)
3. (Original) The method of claim 1, wherein the network address is automatically assigned by performing an algorithm that generates a unique address in response to providing the shelf and/or slot addresses as inputs to the algorithm.
4. (Original) The method of claim 3, further comprising executing instructions stored on the board to perform the algorithm.
5. (Currently Amended) The method of claim 1, ~~wherein the board is a PICMG (PCI (peripheral component interface) Industrial Computers Manufacturing Group)-compliant board,~~ and the shelf and the slot addresses are respectively obtained by issuing GetAddressInfo and GetShelfAddressInfo IPMI (Intelligent Platform Management Interface) commands.
6. (Currently Amended) The method of claim 1, wherein the board is made by an original equipment manufacturer (OEM) ~~and configured in accordance with the~~

~~CompactPCI standard~~, and the shelf and the slot addresses are obtained by employing OEM-specific IPMI (intelligent Platform Management Interface) commands.

7. (Original) The method of claim 1, wherein the network address is automatically assigned by performing a query on a lookup table containing a unique network address for each shelf address and slot address combination to obtain the static network address.

8. (Original) The method of claim 7, wherein the network address is automatically assigned by performing operations including:

- configuring an address proxy server with an address lookup table containing a unique network address for each shelf address and slot address combination;
- sending the shelf and slot addresses from the board to the address proxy server;
- querying the address lookup table based on the shelf and slot addresses to retrieve a corresponding network address; and
- returning the network address to the board.

9. (Original) The method of claim 7, further comprising storing the lookup table on the board.

10. (Currently Amended) A method comprising:

- obtaining, for a network port on a board installed in a card module platform, a temporary IP (Internet Protocol) address from a DHCP (Dynamic Host Configuration Protocol) server;

- receiving an initial boot image from the boot server;

- determining a shelf address and a slot address of the board installed in the card module platform by executing instructions in the initial boot image;

- sending the shelf and slot addresses to a boot server;

- receiving a ~~bootable~~ final boot image along with an IP address from the boot server;

- executing the ~~bootable~~ final boot image; and

setting a static IP address for the board in accordance with the IP address that was received from the boot server with the final boot image.

11. (Original) The method of claim 10, wherein the boot server comprises a PXE (pre-boot execution environment) server.

12. (Original) The method of claim 10, further comprising:  
executing firmware on the board to initialize a network interface; and  
performing a DHCP message exchange via the network interface to obtain the temporary address.

13. (Original) The method of claim 10, further comprising returning an IP address for the boot server in addition to the temporary IP address.

14. (Cancelled)

15. (Currently Amended) The method of claim [[15]], further comprising:  
configuring the boot server an IP address lookup table containing a unique network address for respective shelf address and slot address combinations; and  
querying the IP address lookup table based on the shelf and slot addresses to retrieve the IP address to be assigned as the static IP address.

16. (Original) The method of claim 10, wherein data exchanged between the board and the boot server is sent via the Trivial File Transfer Protocol (TFTP).

17. (Original) The method of claim 10, further comprising co-locating the DHCP server and the boot server on the same machine.

18. (Currently Amended) A card modular platform board, comprising:  
a printed circuit board (PCB) on which a plurality of components are operatively coupled and linked in communication via circuitry on the PCB, including,

a processor;  
memory;  
at least one backplane connector, configured to couple to a backplane  
installed in a card modular platform shelf having a plurality of slots;  
a network interface coupled to a network port; and  
at least one of a non-volatile storage device and a mass storage device;  
and  
machine executable instructions stored in said at least one of a non-volatile  
storage device and a mass storage device, which when executed by the processor  
perform operations in response to insertion of the board into a slot, comprising:  
determining an address for the shelf and the slot; and  
automatically assigning a static ~~network~~ Internet Protocol ("IP") address  
for the network port based on a combination of the shelf address and the slot address.

19. (Original) The card modular platform board of claim 18, wherein the  
machine instructions comprise firmware instructions stored in a non-volatile memory.

20. (Currently Amended) The card modular platform board of claim 18, wherein  
execution of the machine instructions automatically assigns the ~~network~~ IP address by  
performing an algorithm that generates a unique address in response to providing the  
shelf and slot addresses as inputs to the algorithm.

21. (Original) The card modular platform board of claim 18, further comprising  
data stored in said at least one of a non-volatile storage device and a mass storage device  
comprising a lookup table containing a unique network address for respective shelf  
address and slot address combinations, and wherein execution of the machine obtains the  
static network address by performing a query on a lookup table using the shelf and slot  
addresses that are determined as inputs.

22. (Currently Amended) A card modular platform board, comprising:

a printed circuit board (PCB) on which a plurality of components are operatively coupled and linked in communication via circuitry on the PCB, including,

a processor; memory;

at least one backplane connector, configured to couple to a backplane installed in a card modular platform shelf having a plurality of slots;

a network interface coupled to a network port; and

at least one of a non-volatile storage device ~~[[and]]~~ or a mass storage device; and

machine executable instructions stored in said at least one of ~~[[a]]~~ the non-volatile storage device ~~and a or the~~ mass storage device, which when executed by the processor perform operations in response to insertion of the board into a slot, comprising:

initializing the network interface;

performing client-side operations in a DHCP (Dynamic Host Configuration Protocol) message exchange to obtain a temporary IP (Internet Protocol) address from a DHCP server;

determining ~~[[an]]~~ addresses for the shelf and the slot;

sending the shelf and slot addresses to a boot server;

receiving a bootable image along with an IP address from the boot server;

booting the bootable image,

wherein the IP address that was received from the boot server is assigned by the bootable image as a static IP address for the network port,

wherein the IP address is assigned dependent upon the shelf and slot addresses and independent of the PCB or the plurality of components on the PCB.

23. (Currently Amended) The card modular platform board of claim 22, wherein execution of the machine instructions performs further operations, including:

receiving an initial boot image from the boot server; ~~[[and]]~~

executing instructions in the initial boot image to obtain the shelf and slot addresses;

receiving a final boot image; and

booting the final boot image,  
wherein the static IP address is assigned by the final boot image.

24. (Currently Amended) A tangible machine-readable medium to provide instructions, which when executed by a card modular platform board performs operations in response to insertion of the board into a slot of a card modular platform shelf, including:  
determining an address for the shelf and the slot; and  
automatically assigning a static ~~network~~ Internet Protocol ("IP") address for the network port based on the shelf address and the slot address.

25. (Currently Amended) The tangible machine-readable medium of claim 24, wherein execution of the machine instructions automatically assigns the ~~network~~ IP address by performing an algorithm that generates a unique address in response to providing the shelf and slot addresses as inputs to the algorithm.

26. (Currently Amended) The tangible machine-readable medium of claim 24, further including data comprising a lookup table containing a unique ~~network~~ IP address for respective shelf address and slot address combinations, and wherein execution of the instructions obtains the static network address by performing a query on a lookup table using the shelf and slot addresses that are determined as inputs.

27. (Currently Amended) The tangible machine-readable medium of claim 24, wherein the medium comprises a firmware storage device, and the instructions comprise firmware.

28. (Currently Amended) The tangible machine-readable medium of claim 24, wherein ~~the card modular platform board is a PICMG (PCI Industrial Computers Manufacturing Group) compliant board,~~ and the shelf and the slot addresses are respectively obtained by issuing GetAddressInfo and GetShelfAddressInfo IPMI

(Intelligent Platform Management Interface) commands via execution of the instructions.